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MN Directorate completes weapon powered flight test

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EGLIN AIR FORCE BASE, Fla. — The Air Force Research Laboratory's Munitions Directorate and Lockheed Martin Missiles & Fire Control of Dallas successfully completed a powered flight test of its Low Cost Autonomous Attack System (LOCAAS) weapon.

The test included deploying its wings and starting its engine following release from a Cessna 441 Conquest II test aircraft flown by Aeromet of L3 Communications located in Tulsa, Oklahoma.

This was the maiden flight test of the Technical Directions Inc. (TDI), Ortonville Michigan J-45G turbojet engine previously developed under a Small Business Innovative Research effort. After the wings were fully deployed, locked, and stable flight achieved, the engine windmill started and accelerated to the desired speed conditions to conduct the test mission profile.

During the remainder of the mission profile, the LOCAAS Laser Detection And Ranging (LADAR) seeker and Autonomous Target Acquisition (ATA) algorithms successfully detected and identified the correct re-locatable target, then guided to a simulated detonation point. The LOCAAS navigated through predetermined waypoints to scan two search areas. The first search area had no target vehicles within it while the second was populated with both the intended target and other vehicles designed to spoof the LOCAAS. The seeker found the right target, engaged it, and photographed the target using a camera inserted in the place of a warhead and triggered at the computed warhead fire event. @

LOCASS hanging under the Cessna 441 Conquest II test aircraft